

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

> Applicants: Abdul Malik Serial No.: 10/001,489

Filing Date: 10/23/2001

For: Sample Preconcentration Tubes with Sol-Gel Surface Coatings and/or Sol-Gel Monolithic

Examiner: Therkorn, Ernest G.

Art Unit: 1723

**Beds** 

Our Reference No.: 1372.214.PRC

Dear Sir:

Enclosed please find the following:

1. Information Disclosure Statement By Applicants- 6 pages;

2. Copies of the front covers of sixty (60) Non-Patent Literature Documents; and

3. Self-addressed, postage prepaid post card to serve as a receipt for items 1-2.

Very respectfully,

SMITH & HOPEN

By: Anton J. Hopen

anton.hopen@baypatents.com

AJH/cm enclosure

CERTIFICATE OF MAILING (37 C.F.R. 1.8)

I HEREBY CERTIFY that this correspondence is being mailed with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 22, 2004.

Date: January 22, 2004

Charlene Morgan

Attorney-Client Privileged Communication

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

e Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE

tute for form 1449/PTO

Sheet

STATEMENT BY APPLICANT

6

(Use as many sheets as necessary)

C mplet if Known			
Applicati n Number	10/001,489	<del></del>	
Filing Date	10/23/2001	· -	
First Named Inventor	Abdul Malik		
Art Unit	1723		
Examiner Name	Therkorn, Ernest G.		
Attorney Docket Number	1372.214.PRC		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	AICHHOLZ, REINER, Preparation of Glass Capillary Columns Journal of High Resolution Chromatography, Vol. 13, pp. 71-73 (1990).	
	2	ALLTECH, Chromatography Catalog, pp. 172 (1997).	
	3	ALGELT, KLAUS H. ET AL., Chromatography on Petroleum Analysis, (1979), Marcel Dekker, New Yourk and Basel.	
	4	BELARDI, ROBERT P. ET AL., The Application of Chemically Modified Fused Silica, 24, pp. 179-191, (1989).	
	5	BEREZKIN, VICTOR G.; DRUGOV, YURI S., Gas Chromatography in Air Pollution Analysis, (1991) Elsevier	-
	6	BEREZKIN, VICTOR G. ET AL., Capillary Columns with Several Layers, Vol. 47, pp. 600-604, (1992).	
	7	BLAU, KARL; HALKET, JOHN M. EDS., Handbook of Derivatives for Chromatography, 2nd ed. (1993), John Wiley & Sons.	
	8	BLOOMBERG, L., Modification of Glass Capillary Columns, Journal of HRC & CC, Vol. 3, pp. 527, (1980).	
	9	BRINKER, C. JEFFREY ET AL., Sol-Gel Science, Academic Press, (1990).	
	10	BROWN, PHYLLIS R. ET AL., The Separation and the Characterization of Long Chain, Critical Reviews in Analytical Chemistry, Vol. 21, pp. 193-208, (1989)	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of Information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE ork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Compl te if Kn wn **Application Number** 10/001,489 Filing Date INFORMATION DISCLOSURE 10/23/2001 STATEMENT BY APPLICANT First Named Inventor Abdul Malik

(Use as many sheets as necessary)

6 of

Sheet

Art Unit 1723 **Examiner Name** Therkorn, Ernest G. Attorney Docket Number 1372.214.PRC

		NON PATENT LITERATURE DOCUMENTS	
Examiner   Cite   Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), tit   the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-is   number(s), publisher, city and/or country where published.		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue	T <sup>2</sup>
	11	CLEMENT, RAY E., Gas Chromatography, Biochemical, Biomedical, and Clinical Applicants, (1990), Wiley.	
	12	COLLINSON, MARYANNE M., ET AL., Sol-Gels and Electrochemistry, Analytical Chemistry, Vol. 72, pp. 702A-709A, (2000).	
	13	COULIBALY, KELEGOUN, ET AL., An Overview of Solid-Phase Extraction, Food Rev. Int., Vol. 12, pp. 131-151, (1996).	
	14	EPA METHOD 604, Methods for Organic Analysis, Environmental Protection Agency, pp. 58-66, (1984).	
	15	ETTRE, L. S., Performance of Open Tubular Columns, Chromatographia, Vol. 18, pp. 477-488, (1984).	
	16	ETTRE, LESLIE S., ET AL., Basic Relationships of Gas Chromatography, (1994), Advanstar.	
	17	FERIOLI, V., ET AL., High-Performance Liquid Chromatography, Chromatographia, Vol. 14, pp. 61-65, (1995).	
	18	FIELDING, M., ET AL. Disinfection By-products in Drinking Water, Current Issues, Royal Society of Chemistry (1999).	
	19	WHO Guidelines for Drinking-Water Quality, 2nd ed., WHO (World Health Organization), Geneva, (1993).	
	20	HAMLET, CHRISTINE, ET AL., Novel Sol-Gel Dendrimer Coatings	

Examiner	Date
Signature	Considered

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy or this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (08-03) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. C mplet if Known Substitute for control 440/PXX Applicati n Number 10/001,489 Filing Date INFORMATION DISCLOSURE 10/23/2001 STATEMENT BY APPLICANT **First Named Inventor** Abdul Malik Art Unit 1723 (Use as many sheets as necessary) **Examiner Name** Therkorn, Ernest G. Attorney Docket Number 1372.214.PRC Sheet 3 6 of

Examiner	Cite	NON PATENT LITERATURE DOCUMENTS  Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Initials*	No.1	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
-	21	HARTMANN, H., ET AL., Trace Determination of Pesticides, Fresenius Environmental Bulletin, Vol. 7, pp. 96-103, (1998).	
	22	HARUVY, Y., ET AL., Sol-Gel Replication of Microoptical Elements and Arrays, Chem. Mater, Vol. 9, pp. 2604-2615, (1997).	
	23	HAYES, J.D., ET AL, HPCE-Final Program, pp. 80-81, (1997).	_
	24	HAYES, JAMES D.; MALIK, ABDUL, Sol-Gel Monolithic Columns, Analytical Chemistry, Vol. 72, pp. 4090-4099, (2000).	
	25	JANAK, K., ET AL., Static Coating of Capillary Columns, Journal of HRC & CC, Vol. 8, pp. 843-847, (1985).	
	26	KATAOKA, HIROYUKI, ET AL., Simple and Rapid Determination of Amphetamine, Journal of Anayltical Toxicology, Vol. 24, pp. 257-265, (2000).	
	27	KOIVUSALMI, EIJA, ET AL., Quantitative RP-HPLC Determination, Analytical Chemistry, Vol. 71, pp. 86-91, (1999).	
	28	NAWROCKI, J., Silica Surface Controversies, Chromatographia, Vol. 31, pp. 177-205, (1991).	
	29	LEE, M.L., ET AL, Fused Silica Capillary Column Technology for Gas Chromatography, Journal of Chromatographic Science, Vol. 22, pp. 136-142, (1984).	
	30	LOPEZ-AVILA, VIORICA, ET AL., Evaluation of Soxtec Extraction, Journal of AOAC International, Vol. 76, pp.864-880, (1993).	

Examiner	Date	
Signature	Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

perwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

6

Sheet

Compl t if Kn wn			
Applicati n Number	10/001,489		
Filing Date	10/23/2001		
First Named Inventor	Abdul Malik		
Art Unit	1723		
Examiner Name	Therkorn, Ernest G.		
Attorney Docket Number	1372.214.PRC		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials* No. Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	31	MACKENZIE, J. D., Hybrid Organic-Inorganic Materials, American Chemistry Society, pp. 227-236, (1995).	
	32	MAJORS, RONALD E., Liquid Extraction Techniques for Sample Preparation, LC*GC International, Vol. 10, pp. 93-101, (1997).	
	33	MINNICH, MARTI M., ET AL., Extraction Methods for Recovery, Journal of AOAC International, Vol. 79, pp.1198-1204, (1996).	
	34	MUKHERJEE, SHYAMA P., Supercritical Drying in Structural and Microstructural Evolution of Gels; A Critical Review, pp. 747-759, (1988).	
	35	OESTERHELT, G., ET AL., Analyse von Hydroxypivalaldehyd, Fresenuis Z. Anal. Chem., Vol.321, pp. 553-555, (1985).	
	36	PALKAR, V. R., Sol-Gel Derived Nonostructured, NanoStructured Materials, Vol. 11, pp. 369-374, (1999).	
	37	PAWLISZYN, JANUSZ, Theory of Solid-Phase Microextraction, Journal of Chromatographic Science, Vol. 38, pp. 270-278, (1999).	
	38	REIGHARD, TRICIA S., ET AL., Bridging the Gap Between Supercritical, Critical Rev. in Analytical Chem., Vol. 26, pp. 61-99, (1996).	
	39	ROTZSCHE, HARALD, Stationary Phases in Gas Chromatography, Journal of Chromatography Library, Vol. 48, Elsevier, (1991).	
	40	SCHEPPERS WERCINSKI, SUE ANN, Solid Phase Micorextraction: A Practical Guide, Marcel Dekker, Inc., (1999).	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Compl t if Known

ute for form 1449/PTO INFORMATION DISCLOSURE

Application Numb r 10/001,489 **Filing Date** 10/23/2001 **First Named Inventor** Abdul Malik Art Unit 1723 **Examiner Name** Therkorn, Ernest G.

1372.214.PRC

(Use as many sheets as necessary)

STATEMENT BY APPLICANT

Attorney Docket Number Sheet 5 6 of

•		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*			
	41	SCHOMBURG, G., ET AL., Alkylpolysiloxane Galss Capillary Columns, Chromatographia, Vol. 12, pp. 651-660, (1979).	
	42	SHENDE, CHETAN, ET AL., Sol-Gel Poly(ethylene gylcol) Stationary Phase, Analytical Chemistry, Vol. 75, pp. 3518-3530, (2003).	
	43	STARK, F. O., ET AL., The Interactions between Trialkylsilanes and E-Glass, The Journal of Physical Chemistry, Vol. 72, pp. 2750-2754, (1968).	
	44	FURTON, KENNETH, ET AL., The Use of Solid-Phase, Journal of Chromatographic Science, Vol. 38, pp. 297-306, (2000).	
	45	VAN DER VLIS, E., ET AL., Combined Liquid-liquid Electroextraction, Journal of Chromatography A, pp. 333-341, (1994).	
*	46	VOROTILOV, K.A., ET AL., ORMOSIL Films: Properties and Mircoelectronic Applications, Journal of Sol-Gel Sci. and Tech. Vol. 8, pp. 581-584, (1997).	
	47	WANG, DONGXIN, Sol-Gel Chemistry - Mediated Novel Appraoch to column Technology for High-Resolution Capillary Gas Chromatography, (2000).	
	48	WANG, DONGXIN, ET AL., Preparation and GC Performance of col-Gel Technology-Based Open Tubular Columns., pp. 505-513, (1996).	
	49	WANG, ZHENYU, ET AL., High-Performance Polyethylene, Journal of Chromatography, Vol.893, pp. 157-168, (2000).	
	50	WELSCH, THOMAS, ET AL., The Thermal Immobilization of Hydroxy-Terminated Silicon, Journal of High Resolution Chromatography, Vol. 14, pp. 153-159, (1991).	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. Applicant's unique citation designation number (optional). ∠ Applicant is to place a check mark here it English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known Application Numb r 10/001,489 **Filing Date** 10/23/2001 **First Named Inventor** Abdul Malik Art Unit 1723 **Examiner Name** Therkorn, Ernest G.

(Use as many sheets as necessary)

e for form 1449/PTO

Attorney Docket Number 1372.214.PRC Sheet 6 6 of

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	
	51	WESTWOOD, S.A., Supercritical Fluid Extraction and its Use on Chromatographic Sample Preparation, CRC Press, (1993).	
	52	WILKED, G.L., ET AL., "Creamers": Hybid Materials Incoporating, Polymer Preprints, Vol. 26, pp. 300-302, (1985).	
	53	WOOLLEY, C.L., ET AL., Deactivation of Fused-Silica, Journal of Chromatography, Vol. 367, pp. 9-22, (1986).	
	54	WU, JINGCUN, ET AL., Polypyrrole-Coated Capillary In-Tube, J. Microcolumn Separations, Vol. 12, pp. 255-266, (2000).	
	55	WU, JINGCUN, ET AL., Polypurrole-Coated Capillary, Analytical Chemistry, Vol. 73, pp. 55-63, (2001)	
	56	YAKABE, YOSHIKUNI, ET AL., Immobilization method for polyethylene, Journal of Chromatography, Vol. 558, pp. 323-327, (1991).	
	57	ZAPF, ANDREAS, ET AL., GC Analysis of Organic Acids, Journal of High Resolution Chromatography, Vol. 22, pp. 83-88, (1999).	
	58	ZENG, ZHAORUI, ET AL., Solid Phase Microextraction Using Fused-Silica, Analytical Chemistry, VOI. 73, pp. 2429-2436, (2001).	
	59	ZHANG, J., ET AL., Development of the Peronsal Aldehydes, Environmental Science & Technology, Vol. 34, pp. 2601-2607, (2000).	
	60	ZHANG, ZHOUYAO, ET AL., Solid-Phase Microextraction, Analytical Chemistry, Vol. 66, pp. 844A-853A, (1994).	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.